



WILDLIFE MANAGEMENT

AND RESEARCH NOTES

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	TITLE: 2008 Late Canada Goose Zone Season Results	
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Abstract: *In July 2007, Indiana was granted an experimental late Canada goose season in thirty counties to target giant Canada geese (*Branta canadensis maxima*). To participate in the Late Canada Goose Zone Season, hunters must have a valid Indiana hunting license, Indiana and federal waterfowl stamps, HIP number, and a free permit. Each hunter is required to return a brief survey that is distributed with each permit. Permits were issued to 4,231 hunters. Of these, an estimated 2,835 hunters participated in the season. Hunters checked in a total of 3,705 Canada geese during the 2008 late season. Mean male skull length (statewide) was 130.7mm. The estimated percent of giant Canada geese in the harvest was 81.7%. Statewide harvest during the 2008 Late Canada Goose Zone Season is estimated to be 3,944 giant Canada geese and 883 B. c. interior geese.*

Introduction

In July 2007, Indiana was granted an experimental late Canada goose season in thirty counties. The experiment period includes the 2007-08 through 2009-10 waterfowl seasons (three years). This late season is intended to target giant Canada geese (*Branta canadensis maxima*) in and around Indiana's urban areas. At the end of the experiment period, if Indiana is able to show the US Fish and Wildlife Service (USFWS) that at least 80% of the harvest was made up of giant Canada geese, then Indiana can ask that the season be granted operational status, which no longer requires the evaluation described below (permits, checking birds).

The season runs from 1 – 15 February. Shooting hours are ½ hour before sunrise to sunset with a bag limit of 5 birds per day (possession limit of 10). The counties included in the Late Canada Goose Zone are Elkhart, LaPorte, Marshall, St. Joseph, Starke (South Bend region), Adams, Allen, Dekalb, Huntington, Kosciusko, Lagrange, Noble, Steuben, Wells, Whitley (Ft. Wayne region), Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby (Indianapolis region), Clay, Greene, Parke, Sullivan, Vermillion, and Vigo (Terre Haute region).

Methods

To participate in the Late Canada Goose Zone Season, hunters must have a valid Indiana hunting license, Indiana and federal waterfowl stamps, HIP number, and a free permit. Each hunter is required to return a brief survey that is distributed with each permit.

Hunters are required to check in every goose killed during this season. Birds must be checked in within 48 hours of kill. Check station staff age each bird. Each adult is then sexed and its head is removed. A tag, with date and county of kill and sex of the bird, is affixed to each head. Heads are then frozen and transported to the Bloomington field office, where skull and culmen lengths are measured.

Skull measurements of males were used in the algebraic proportioning formula of Trost et al. (1992) to determine the proportion of harvest that is made up of giant Canada geese. Baseline mean skull lengths of 132.8mm for giant males and 121.1mm for *B. c. interior* males were derived from Moser and Rolley (1990).

Results

Permits were issued to 4,231 hunters. Of those, 1,764 (42%) were issued from the Bloomington office via US Postal Service in response to telephone or e-mail requests. Of the hunters issued permits, 55% had returned the attached survey as of 24 March 2008. Of these, 67% reported having hunted Canada geese during the late season. Based on this, an estimated 2,835 hunters participated in the 2008 Late Canada Goose Zone Season in Indiana.

Hunters checked in a total of 3,705 Canada geese during the 2008 late season. Of these, 2,048 were adults (1,083 male, 962 female, 3 unknown sex), 1,278 juveniles, and 379 of unknown age. In addition, hunters reported not checking 613 geese, or 0.265 per respondent to the survey. Therefore, an estimated 1,122 geese were killed but not checked, raising the total estimated harvest to 4,827 during the 2008 Late Canada Goose Zone Season.

Mean male skull length was 130.7mm (95% confidence interval = 130.3 – 131.1mm). The estimated percent of giant Canada geese in the harvest was 81.7% (95% CI = 78.5 – 84.8%). Statewide harvest was estimated to be made up of 3,944 giant Canada geese and 883 *interior* Canada geese.

Statewide, Indiana met the USFWS threshold (at least 80% giants in the harvest) during 6-10 and 11-15 February, and the threshold was within the 95% confidence interval during 1-5 February.

Discussion and Recommendations

Using data from banded birds recovered during the 2008 Late Canada Goose Zone Season, I estimate that 10 – 30% of the adult birds checked were incorrectly sexed. This probably drove down the estimated percentage of giants in the harvest, because many females (which are typically smaller than males) were included in the measurements of male skull lengths. Therefore, the actual percentage of giants in the harvest is likely higher than the estimated 81.7%. As check station operators gain confidence and proficiency, it is hoped that numbers of improperly sexed birds will decrease in future years. Banded birds will continue to be cross-checked against banding records in future years in an attempt to determine a robust error rate.

Hunter response was overwhelmingly positive. Most dedicated goose hunters in Indiana have been aware of the efforts to obtain this late season over the past several years and were elated to finally receive it. The few complaints focused on difficulty in receiving permits, the check-in requirement, and counties that were closed that hunters felt should be open. However, once the check-in requirements were explained to hunters as a requirement for only the first three years, most understood. Also, banding efforts will be increased in Lake and Porter counties, in an effort to gather the necessary data to add these counties to the Late Canada Goose Zone. This area did not have a serious goose problem when the efforts to secure a late season began, but now has the highest density of breeding Canada geese in the state.

The biggest challenge encountered in this first year was the time it took to issue the required permit. We allowed hunters to call or e-mail to request a permit, which were then mailed from the Bloomington office. Overwhelming response, especially in the 2-3 weeks leading up to the season, meant that the time of the waterfowl biologist and the office staff was monopolized in preparing and sending permits. This was complicated by the requirement for a separate permit to participate in the

Light Goose Conservation Order. Beginning next year, we will be attempting to further streamline the permit process for both the Late Canada Goose season and the Light Goose Conservation Order.

One issue that we did not catch until the season was well underway is that the check stations closed at 1400. Therefore, on the last day of the season, hunting was open for several hours after the check stations closed. Next year we need to address this issue, and either state explicitly that birds killed on the last day of the season do not need to be checked, or close the season at 1200 on the last day to allow time to get to a check station.

Literature Cited

Moser, TJ and RE Rolley. 1990. Discrimination of giant and *interior* Canada geese of the Mississippi Flyway. Wildl Soc Bull 18:381:388.

Trost, RE, TJ Moser, MS Lindberg, and PM Castelli. 1992. Evaluating the use of morphological measurements of Canada geese to determine breeding-ground affiliations: Interim report. Unpubl Rep. 27pp.



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